

1 CLAIMS  
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5 We claim:

6 1. A combination for amelioration of vascular insufficiency, comprising:  
7 In a pharmaceutically acceptable carrier, a therapeutic dose of cystine and EDTA.  
8 2. The claim according to claim 1, further comprising:  
9 A therapeutic dose of Selenium.  
10 3. The claim according to claim 2, further comprising:  
11 A therapeutic dose of Vitamin C.  
12 4. The claim according to claim 3, further comprising:  
13 A therapeutic dose of Vitamin E.  
14 5. The claim according to claim 4, further comprising:  
15 A therapeutic dose of zinc.  
16 6. A method of treatment of vascular insufficiency, comprising:  
17 In a pharmaceutically acceptable carrier, administering cystine and EDTA.  
18 7. The method according to claim 6, further comprising the following step:  
19 Administering a therapeutic dose of Selenium.  
20 8. The method according to claim 7, further comprising the following step:  
21 Administering a therapeutic dose of Vitamin C.  
22 9. The method according to claim 8, further comprising the following step:  
23 Administering a therapeutic dose of Vitamin E.  
24 10. The method according to claim 9, further comprising the following step:  
25 Administering a therapeutic dose of zinc.  
26 11. A method of measurement of efficacy and of treatment of vascular insufficiency, comprising:  
27 Measuring glutathione levels in a patient, and upon determination of inadequate glutathione, administration of  
28 cystine;  
29 Determining propensity to aggregation using the following steps:  
30 Stabilizing a patient blood sample to prevent natural clotting;

1           Centrifuging said blood sample to generate a platelet fraction and extracting said platelet fraction;

2           Testing subparts of said platelet fraction with at least reagents selected from the group of ADP,

3           epinephrine, collagen, and thrombin, and with saline as a control by combining said at least one reagent and

4           said saline with said subpart of said platelet fraction in a cuvette comparable in size to a major artery;

5           Generating output from agitation and testing in a platelet aggregometer into which said at least two cuvettes

6           have been placed;

7           Inspecting said cuvettes after agitation and testing to assure competent test results;

8           Rating each of said cuvettes for propensity to aggregation on a scale from 1 to 5, as set forth in Table I;

9           And upon determination of excess propensity to aggregation, administration of a therapeutic dose of EDTA and

10          cystine, and intermittent continuation of said administration at a set first interval with repetition at a greater interval

11          than said first interval of said determination step, until achievement of normal range of aggregation as set forth in

12          Tables VI.

13. The method according to claim 11, further comprising the following step:

14          Monitoring of the achievement of normal range to ultimately restore glutathione levels to normal level, which

15          should be approximately 200-400 micromoles/liter for plasma and red blood cells.

16. The method according to claim 11, further comprising the following step:

17          Administering a therapeutic dose of selenium.

18. The method according to claim 13, further comprising the following step:

19          Administering a therapeutic dose of Vitamin C.

20. The method according to claim 14, further comprising the following step:

21          Administering a therapeutic dose of Vitamin E.

22. The method according to claim 15, further comprising the following step:

23          Administering a therapeutic dose of zinc.

24. The method according to claim 16, further comprising the following step:

25          Monitoring creatinine excretion.

26. A method of monitoring the response to administration of EDTA for measurement of efficacy and treatment of

27          vascular insufficiency, comprising:

28           Centrifuging said blood sample to generate a platelet fraction and extracting said platelet fraction;

1       Testing subparts of said platelet fraction with at least reagents selected from the group of ADP,  
2       epinephrine, collagen, and thrombin, and with saline as a control by combining said at least one reagent and  
3       said saline with said subpart of said platelet fraction in a cuvette comparable in size to a major artery;

4       Generating output from agitation and testing in a platelet aggregometer into which said at least two cuvettes  
5       have been placed;

6       Inspecting said cuvettes after agitation and testing to assure competent test results;

7       Rating each of said cuvettes for propensity to aggregation on a scale from 1 to 5, as set forth in Table I;

8       And upon determination of excess propensity to aggregation, administration of a therapeutic dose of EDTA and  
9       cystine, and intermittent continuation of said administration at a set first interval with repetition at a greater interval  
10      than said first interval of said determination step, until achievement of normal range of aggregation as set forth in  
11      Tables VI.

12     19. The method according to claim 18, further comprising the following step:

13     Measuring glutathione levels in a patient, and upon determination of inadequate glutathione, administration of  
14      cystine.

15     20. The method according to claim 19, further comprising the following step:

16     Monitoring of the achievement of normal range to ultimately restore glutathione levels to normal level, which  
17      should be approximately 200-400 micromoles/liter for plasma and red blood cells.

18     21. The method according to claim 18, further comprising the following step:

19     Administering a therapeutic dose of selenium.

20     22. The method according to claim 21, further comprising the following step:

21     Administering a therapeutic dose of Vitamin C.

22     23. The method according to claim 22, further comprising the following step:

23     Administering a therapeutic dose of Vitamin E.

24     24. The method according to claim 23, further comprising the following step:

25     Administering a therapeutic dose of zinc.

26     25. The method according to claim 24, further comprising the following step:

27     Monitoring creatinine excretion.

28     26. A method of measurement of efficacy and of treatment of vascular insufficiency, comprising:

1 Measuring glutathione levels in a patient, and upon determination of inadequate glutathione, administration of  
2 cystine;

3 Monitoring of the achievement of normal range to ultimately restore glutathione levels to normal level, which  
4 should be approximately 200-400micromoles/liter for plasma and red blood cells;

5 Determining propensity to aggregation using the following steps:

6 Stabilizing a patient blood sample to prevent natural clotting;

7 Centrifuging said blood sample to generate a platelet fraction and extracting said platelet fraction;

8 Testing subparts of said platelet fraction with at least reagents selected from the group of ADP,  
9 epinephrine, collagen, and thrombin, and with saline as a control by combining said at least one reagent and  
10 said saline with said subpart of said platelet fraction in a cuvette comparable in size to a major artery;

11 Generating output from agitation and testing in a platelet aggregometer into which said at least two cuvettes  
have been placed;

12 Inspecting said cuvettes after agitation and testing to assure competent test results;

13 Rating each of said cuvettes for propensity to aggregation on a scale from 1 to 5, as set forth in Table I;

14 And upon determination of excess propensity to aggregation, administration of a therapeutic dose of EDTA and  
15 cystine, and intermittent continuation of said administration at a set first interval with repetition at a greater interval  
16 than said first interval of said determination step, until achievement of normal range of aggregation as set forth in  
17 Tables VI;

18 Measuring total serum calcium, ionized calcium, total magnesium, and ionized magnesium; and

19 Monitoring creatinine excretion.

20 27. The method according to claim 26, further comprising the following step:

21 Administering a therapeutic dose of selenium.

22 28. The method according to claim 27, further comprising the following step:

23 Administering a therapeutic dose of Vitamin C.

24 29. The method according to claim 28, further comprising the following step:

25 Administering a therapeutic dose of Vitamin E.

26 30. The method according to claim 29, further comprising the following step:

27 Administering a therapeutic dose of zinc.